

YEFREMOV, German Vasil'yevich; POZLYASHOVA, V.A., red.

[Literature on inorganic chemical analysis; a manual
for students] Literatura po neorganicheskomu khimicheskomu
analizu; posobie dlia studentov. Leningrad, Leningr. univ.
1964. 55 p. (MIRA 17:10)

YEFREMOV, I.

Trolley Buses

Trolley bus operation on sharp-graded roads. Zhil. -kom. khoz. 2, No. 7, 1952.

MONTHLY LIST OF RUSSIAN ACCESSIONS, LIBRARY OF CONGRESS, NOVEMBER 1952, UNCLASSIFIED.

YEFREMOV, I., doktor tekhnicheskikh nauk, professor.

~~For better organization of municipal transportation services. Zhil.~~
-kom. khov. 7 no.2:18-20 '57. (MIRA 10:4)
(Local transit)

YEFREMOV, I.

Order desk. Tekh. mol. 25 no.3:27 Mr '57.
(Fans, Electric) (Tools)

(MIRA 10:6)

11-1 H2-1100...
YEFREMOV, I., doktor tekhn.nauk prof.

Trolley busses of increased capacity and their construction
characteristics. Zhil.-kom.khoz. 8 no.1:2-6 '58. (MIRA 11:1)
(Trolley busses)

YEFREMOV, I., doktor tekhn.nauk, prof.

Introducing new methods for supplying electric power to the
municipal transportation system. Zhil.-kom.khoz. 9 no.6:10-13
'59. (MIRA 12:10)
(Local transit) (Electric current rectifiers)

9,2540(1020,1159,1161)

88105
S/107/60/000/011/009/010
E073/E335

AUTHOR: Yefremov, I. (Alma-Ata)

TITLE: Voltage Converter for Feeding the Transmitter
Pym-1 RUM-1)

PERIODICAL: Radio, 1960, No. 11, p. 53

TEXT: The circuit is shown in Fig. 1. The rectifier consists of a bridge loop made of four diodes. The transformer Tp_1 has a 1 cm^2 core of transformer sheet.

The windings are as follows: I - 70×2 turns;

II - 2 000 to 2 500 turns (step-up winding);

III - 18×2 turns. The resistances R_1 and R_2 are wound, small-size, high-ohmic resistances. The choke (ΔP_1)

core cross-section is $0.8 - 1.0 \text{ cm}^2$; it has a 2 500-turn winding. The condensers C_1 and C_2 should be able to

withstand a calculated breakdown voltage of the order of 450 - 600 V. The total collector current of the triodes

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S/107/60/000/011/009/010
E073/E335

Voltage Converter for Feeding the Transmitter RUM-1

for a supply voltage of 6 V varies between 0.93 and 1.3 A. The maximum output power is 4 W. When connected to a transmitter the input voltage has to be such that the voltage at the load resistance of the rectifier is 120 - 125 V. The current in the anode circuit of the transmitter should be 25 - 30 mA. On switching-on the indicator lamp of the transmitter, the voltage at the terminals of the voltage transformer should drop to 100 V and the current should increase to 40 mA. The volt-ampere characteristic (U_{rect} , V versus I_{rect} , mA) is plotted in Fig. 2 for $U_n = 6, 4$ and 23 V and $I_n = 0.9 - 1.3$ A, 0.65 - 1.0 A and 0.35 - 0.5 A, respectively. There are 2 figures.

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E073/E335

Voltage Converter for Feeding the Transmitter RUM-1

Fig. 1:

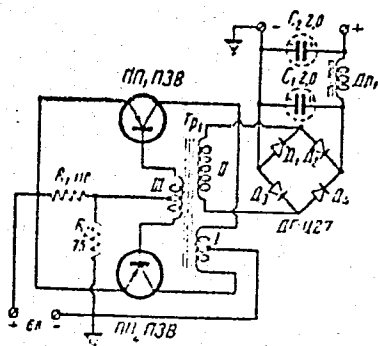


Рис. 1

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Fig. 2:

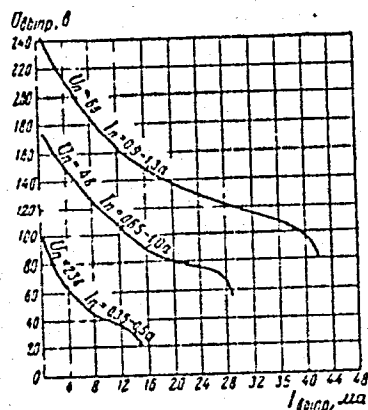


Рис. 2

YEFREMOV, I., doktor tekhn.nauk, prof.

"Operation and repair of trolley-bus rolling stock" by V.A.Popov and others. Reviewed by I. Efremov. Zhil.-kom. khoz. 13 no.3:28-29 Mr '63.
(MIRA 16:3)

(Trolley buses—Maintenance and repair)

(Popov, V.A.)

I. 38122-66 EWP(m)/EWT(1) WW/GD

ACC NR: AT6016720 (N) SOURCE CODE: UR/0000/65/000/000/0056/0068

AUTHOR: Yefremov, I. I.

ORG: Institute of Hydromechanics AN UkrSSR (Institut gidromekhaniki AN UkrSSR) 3a
B+1

TITLE: The unsteady state motion of a thin shape near the separation boundary of fluids with different densities

SOURCE: AN UkrSSR. Gidrodinamika bol'shikh skorostey (High speed hydrodynamics), no. 1. Kiev, Izd-vo Naukova dumka, 1965, 56-68

TOPIC TAGS: unsteady flow, boundary layer theory, fluid flow

ABSTRACT: The article considers the unsteady state motion of an infinitely thin shape with a length of $2c$ in an incompressible fluid with a constant entrance velocity V_0 , at a height h above the surface of incompressible fluids of different densities. The motion is considered in a movable system of coordinates. The OX axis is directed along the undisturbed line of separation in the direction of the entry velocity. The origin of coordinates is taken as the projection of the middle point of the thin shape on this same line. The turbulent motion in the upper and lower half spaces is described, respectively, by the potentials

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ACC NR: AT6016720

$\Phi_1(x, y, t)$ and $\Phi_2(x, y, t)$. Then, flow around a shape can be described by introduction of the potentials

$$\varphi_1(x, y, t) = \bar{\varphi}_1(x, y) e^{i\omega t}; \quad (1)$$

$$\varphi_2(x, y, t) = \bar{\varphi}_2(x, y) e^{i\omega t}; \quad (2)$$

The remainder of the article is taken up with a mathematical development of the problem in the above terms. Orig. art has: 47 formulas and 1 figure.

SUB CODE: 20/ SUBM DATE: 30Sep65/ ORIG REF: 004/ OTH REF: 002

Card 2/2

YE FREMOV, I //

BLINOVA, V.N.; DEMIDOV, A.A.; KOLIN, Ya.S.; MAKUSHKIN, Ya.G.; MYZIN, L.M.;
PERMYAKOV, N.P.; POMEDILKO, A.I.; BOROVIK, Z.G.; YEFREMOV, I.A.;
KOPAYGORODSKIY, A.B.; MARINOV, A.M.; NEKHOROSHKOVA, O.I.; POKROVSKIY,
A.F.; ROMANOVSKIY, A.A.; RASSADNIKOV, Ye.I., red.; SAVEL'YEV, V.I.,
red.; FRIDKIN, A.M., tekhn.red.

[Electric power in the Urals during the past 40 years] Energetika
Urals za 40 let. Moskva, Gos. energ. izd-vo, 1958. 141 p.
(MIRA 11:5)

(Ural Mountain region--Electric power)

~~YEFREMOV, I.A.~~

YEFREMOV, I.A., doktor biol. nauk, prof.

~~YEFREMOV, I.A.~~
Victory over the cosmos. Tekh. mol. 25 no.11:19 N '57. (MLRA 10:11)
(Artificial satellites)

YEFREMOV, Ivan Antonovich, pisatel', uchenyy

The moon is on the agenda. Izobr. i rats. no.10:15 0 '58.
(Space flight to the moon) (MIRA 11:11)

YEFREMOV, I.A., prof.

Science and science fiction. Priroda 50 no.12:41-47 D '61.
(MIRA 14:12)
(Science fiction)

ACCESSION NR: AR4034665

S/0196/64/000/003/V004/V004

SOURCE: Ref. zh. Elektrotekhn. i energ., Abs. 3V27

AUTHOR: Sausen, K.N.; Bogdanov, A. I.; Yefremov, I. A.

TITLE: Photoelectric desk-type exonometer for microphotography

CITED SOURCE: Tr. Vses. n.-i. in-ta med. instrumentov i oborud., vy*p. 2, 1963, 166-169

TOPIC TAGS: exonometer, microphotography, exonometer for microphotography, photoelectric exonometer

TRANSLATION: The EFEN-1 desk-type exonometer is intended for determining exposure in microphotographic work by means of measuring the illumination existing in the plane of the camera photomaterial. The exonometer consists of a selenium photocell a M-95 microammeter, and a scaler in the form of an alignment chart with three scales: S —light sensitivity in GOST units, t —exposure in sec and min, E —illumination in the divisions of the microammeter scale. The exposure range is 0.001 sec —20 min; the light sensitivity, 1 —500 GOST units; the optical-image illumination, 0.01 —16 lux. The exonometer weight, 8 kg; size, 405x295x137 mm. Three illustrations. Bibliography: 3 titles.

Card 1/1 DATE ACQ: 10Apr64

SUB CODE: EC, ES

ENCL: 00

YEFREMOV, I, A. Prof.

°
"Gondwana Land Faces of the Northern Continents," Iz. Ak. Nauk SSSR, Ser.
Geol., No.1, 1948

YEFREMOV, I. A.

USSR/Geophysics - Stratigraphy of Upper Permian Mar/Apr 52

"Concerning Ye. M. Lyutkevich's Book 'Stratigraphy of the Upper Permian Deposits of the Kamsk Urals,'
I. A. Yefremov

"Iz Ak Nauk SSSR, Ser Geol" No 2, pp 147-151

Subject book belongs to the series entitled "Trudy Vses Neft Nauch-issl Geol-razv Inst" (Works of the All-Union Petroleum Sci Res Geol-Prospecting Inst), No 39, 1951. States that Lyutkevich's book is incompletely written and with a tendency to select facts with very weak foundation and without a guiding idea; it should never have been printed, being other than a serious work. 213T84

YEREMOV, I. A.

Geology - Asia, Central

Development of the continental Upper Paleozoic in Central Asia. Dokl. AN SSSR 85 no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress. November, 1952. Unclassified.

YEFIMOV, Ivan Antonovich; OGLOBLIN, I.A., redaktor; OSTRIROV, N.S.,
tekhnicheskiy redaktor

[Road of the winds; a Gobi notebook] Doroga vetrov; Gobiiskie
zametki. Moskva, Vses. uchebno-pedagog. izd-vo Trudrezervizdat,
1956. 358 p. (MLRA 10:5)
(Gobi--Description and travel)

YEFREMOV, I. A. Prof.

1939 "First Representative of Siberian Early Tetrapoda," Dokl. AN SSSR, 23, No.1,

Inst. Paleontology, AS USSR

YEFREMOV, I. A. Prof.

"New Discoveries of Permian Terrestrial Vertebrates on Bashkiria and the
Chkalov Province," Dokl. AN SSSR, 27, No.4, 1940

PA 66177

USSR/Medicine - Paleontology
Medicine - Fossils

Jan 1948

"The First Mongolian Paleontological Expedition of the Academy of Sciences USSR," Prof I. A. Yefremov, 114 pp

"Vest Ak Nauk SSSR" No 1

Author describes expedition that he led. Includes brief summary of the history of paleontological exploration in the Mongolian Republic; missions, organization, and plan of operation of the first Mongolian expedition (1946); itineraries, and most important sites explored; work of the expedition in cultural relations with the Mongolian Republic; results of

66177

USSR/Medicine - Paleontology (Contd) Jan 1948

Investigations of fossil sites; ulterior aspects of the paleontological explorations in the Mongolian Republic.

66177

YEFREMOV, I. A., PROF

YEFREMOV, I. A.

Yefremov, I. A. "Preliminary results of the work of the 1st Mongol Paleontological expedition of the Academy of Sciences in 1946", Trudy Mongol. khovissii (Akad. nauk SSSR, Kom. nauk Mongol. nar. respublikii), Issue 38, 1949, p. 5-28.

So: U-3261, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 12, 1949).

YEFREMOV, I. A.

Works of the Paleontological Institute, Vol 24, Moscow-Leningrad; 1950,
178 pp.

Book W-22202, 7 Apr 52

YEFRIMOV, I. A.

PA 241T46

USSR/Geophysics - Stratigraphy

Nov/Dec 52

"Stratigraphy of the Permian Red-Ocher Deposits of the USSR According to Land Vertebrates," I. A. Yefrimov

"Iz Ak Nauk SSSR, Ser Geol" No 6, pp 49-75

Attempts to make precise the stratigraphical scheme of Permian and Triassic continental deposits, which is useful for future detailed geological investigations on the basis of new data on the faunistic complex of USSR land vertebrates.

241T46

YEFREYEV, I. A.

Paleontology

"Taphonomy' and the geological chronicle." I. A. Yefremov. Reviewed by V. I. Gromov.
Biul. MGIP. Otd. geol. 27 no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress. November, 1952. Unclassified

YEFREMOV, I. A. Prof)

"Problems in the Study of Dinosaurs," Priroda, No.6, pp. 26-37, 1953

Article based on material from a paleontological expedition of Acad Sci USSR in Mongolia, where the expedition discovered a large number of dinosaurs, varying in geological age, the majority of which existed during the Mesozoic.

261T86

YEFREMOV, I.A.; PAVLOVSKIY, Ye.N., akademik.

Second find of a Permian amphibian in the Tungus Basin of Siberia.
Dokl.AN SSSR 91 no.4:943-946 Ag '53. (MLRA 6:8)

1. Akademiya nauk SSSR (for Pavlovskiy). 2. Paleontologicheskiy institut Akademii nauk SSSR (for Yefremov).
(Tungus basin--Batrachia, Fossil) (Batrachia, Fossil--Tungus basin)

ROZHDESTVENSKIY, A.K.; YEFREMOV, I.A., redaktor.

[In search of dinosaurs in Gobi] Na poiskakh dinosavrov v Gobi.
Moskva, Izd-vo Akademii nauk SSSR, 1954. 188 p. (MLRA 7:7)
(Gobi--Description and travel) (Dinosauria)

EFREMOV, I. A.

USSR/Geology - Paleontology

Card 1/1 Pub. 86 - 5/40

Authors : Efremov, I. A. Professor

Title : What is Tafonomy?

Periodical : Priroda 3, 48-54, Mar 1954

Abstract : The introduction of a new science "Tafonomy," the science of preservation of pre-historical life, is announced. The new science is closely related with paleontological and historical geology sciences. The basic ideas of the new sciences, are explained. The word Tafonomy, is taken from the Greek TAFO - preservation and NOMOS - law.

Institution :

Submitted :

YEFREMOV, I.A.

Some remarks on problems of the historical development of dinosaurs.
Trudy Paleont.inst. 48:125-141 '54. (MIRA 8:5)
(Dinosauria)

YEFREMOV, I.A.; ORLOV, Yu.A., redaktor; SABLINA, T.B., redaktor; SHEVCHEN-
~~KO, G.N.~~; tekhnicheskij redaktor.

Fauna of terrestrial vertebrates in Permian cupriferous sandstones
of the western Ural foothills. Trudy Paleont. inst. 54:416 '54.
(Ural Mountain region--Vertebrates, Fossil) (MIRA 8:4)

YEFREMOV, I. A.

"Paleontological Investigations in the Mongolian People's Republic," Tr.
Mongol'sk. komissii AN SSSR, No 59, pp 3-32, 1954

Preliminary results of the expeditions of 1946, 1948, and 1949.
(RZhGeol, No 4, 1955)

Sum. No. 681, 7 Oct 55

YEFREMOV, I.A.; V'YUSHKOV, B.P.; KUZHENITSEV, V.Ye., redaktor; KULIKOV, M.V.,
~~redaktor~~; ARONS, R.A., tekhnicheskii redaktor

[Catalog of Permian and Triassic terrestrial vertebrate deposits
in the U.S.S.R.] Katalog mestonakhozhdenii permskikh i triaso-
vykh nazemnykh pozvonochnykh na territorii SSSR. Moskva, Izd-vo
Akademii nauk SSSR, 1955. 185 p. (Akademiia nauk SSSR. Paleonto-
logicheskii institut. Trudy, no.46) (MLRA 8:9)
(Vertebrates, Fossil)

YEFREMOV, I.A.

American elements in the fauna of Permian reptiles of the
U.S.S.R. Dokl.AN SSSR 111 no.5:1091-1094 D '56. (MLRA 10:2)

1. Paleontologicheskii institut Akademii nauk SSSR.
Predstavleno akademikem Ye.N. Pavlovskim.
(Reptiles, Fossil)

YEFREMOV, I.A.

V.P. Amalitskii; on the one-hundredth anniversary of his birth.
Paleont. zhur. no. 4:3-15 '60. (MIRA 14:1)

1. Paleontologicheskii institut AN SSSR.
(Amalitskii, Vladimir Prokhorovich, 1860-1917)

YEFREMOV, Ivan Antonovich, 1907-

[The record of winds; notes from the Gobi desert.] Doroga
geogr. 216-cy, 2262. 365 p.

YEFREMOV, I.F., dotsent

Comparative evaluation of KMP-2 and KMP-3 pulsating-feed
cutting machines. Izv.vys.ucheb.zav.; gor.shur. no.7:71-76
'59. (MIRA 13:4)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva. Reco-
mendovana kafedroy gornyykh mashin i rudnichnogo transporta.
(Coal mining machinery)

YEFREMOV, I.P.

New design of cutting blades. Mashinostroitel' no.3:15
Mr '60. (MIRA 13:6)

(Cutting machines)

USSR/Chemistry - Rosin

Sep/Oct 48

Gelatinization of Rosin

"Surface Tension and Gelatinating Solutions of Colophony and Its Derivatives," I. F. Yefremov, Chair of Colloid Chem, Ural U, Sverdlovsk, 2 pp

"Kolloid Zhur" Vol X, No 5

During oxidation of rosin, increase in surface activity on boundary of separation of water and hydrocarbon, along with decrease in solubility of colophony, is effected by introduction of active (polar) groups. Gelatinizing ability of ammonium soaps of colophony is increased. Submitted 16 Aug 47.

2/50T58

REFREMOV, I. F.
Gelation of calcium acetate solutions. I. P. Efremov
(Leningrad Technol. Inst., Leningrad). Kolloid. Zhur. 15,
420-38 (1953).--A mixt. of 2 ml. 95% EtOH and 6 ml.
satd. $\text{Ca}(\text{OAc})_2$ gels within 1.5 hrs. if unfiltered, and within
3 days if filtered immediately after mixing; thus, gelation
is accelerated by the presence of the solid phase. Addition
of EtOH to satd. $\text{Ca}(\text{OAc})_2$ soln. (in aq. soln. insufficient to
cause gelation) increases viscosity and lowers elec. cond.
not more than by a factor of 2; this proves absence of poly-
merization or complex formation with the solvent. The re-
sults are explained by the mutual repulsion of the elec.
double layers around the $\text{Ca}(\text{OAc})_2$ particles. J. J. B.

YEFREMOV, I. I.

USSR .

Gelation of freshly obtained vanadium pentoxide sols.
I. P. Yefremov, *Colloid J. (U.S.S.R.)* 10, 261-3 (1948)
(Engl. translation).—See *C.A.* 48, 13358g. H. L. H.

62

✓ Gelation of freshly obtained vanadium pentoxide sols.
L. F. Bikerman (Technol. Inst., Leningrad). *Kolloid Zh.*
16, 981 (1954). -A gel of V_2O_5 was obtained by adding 1
ml. CO_2 , 1 drop 0.01 N $NaOH$, and 1 ml. 0.2 N $NaCl$ to 1
ml. 0.1% V_2O_5 sol, 3 days old. As these sols contained no
long rods and were very dil., no mat of V_2O_5 crystals was pos-
sible in the gel. Thus, gelation must be due to long-range
forces between the V_2O_5 particles. J. J. Bikerman

YEFREMOV, I.F.

Gelation of dilute sols and suspensions [with English summary in insert]
Koll.zhur.18 no.3:276-284 My-Ie '56. (MIRA 9:9)

1.Leningradskiy tekhnologicheskij institut imeni Lenseveta.
(Gelation) (Celleids)

Yefremov, I. F.
YEFREMOV, I.F.; NERPIN, S.V.

Kinetic theory of gelatinization [with summary in English]. Koll.
zhur. 19 no.6:757-758 N-D '57. (MIRA 11:1)

1. Leningradskiy tekhnologicheskij institut im. Lensoveta.
(Gelation)

AUTHOR:
TITLE:

YEFREMOV, I.F., NERPIN, S.V.

The Problem of the Construction of Kinetic Theory of Glutination Processes. (K voprosu o postroyenii kineticheskoy teorii protsessov zhelatinirovaniya, Russian)

PERIODICAL:

Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 4, pp 846 - 849 (U.S.S.R.)

ABSTRACT:

The problem of the development of gels and pastes has attracted scientists' attention already since a relatively long time. Opinions on the nature of these systems differ considerably. It can be shown that the formation of gel can be explained by the fixing of colloid particles at relatively far distances by means of telekinetic powers of molecular and ion-electrostatic origin. There follows the possibility to come to the analogy between the transition of substances built up from molecules from liquid to solid condition and the gelatination of watered brines. In the latter case the powers of molecule attraction and of the ion-electrostatic pushing off appear among the colloid particles instead of attraction and pushing off powers among the single molecules. The existence of a potential barrier and of a lower energetic level beyond this barrier for the case of interaction of the colloidal particles refers to the possible way of relaxation. By starting from these conceptions the nature of the dislocation elasticity can be ascertained, which forms one of the

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The Problem of the Construction of Kinetic Theory of Glutination Processes.

20-4-35/61
~~20-4-35/61~~

principle characteristics of the gelatinated system, and the conduct of the colloid particles in the interior of the gel can be investigated. For this purpose not only the knowledge of the interaction in a single pair of particles is necessary but also of the action of its entity which forms the quasicrystalline gel-grate. The mutual fixation of the particles at distances which correspond to the position of the potential cavities, must determine the minimum value of the potential energy of the system as a whole at the same time; the minimum value corresponding to the condition $d U_{\text{Syst}} / d h = 0$. In the case of reversible

elementary inclination (dislocation) of the system this condition is interrupted and the energetic level of the system will rise, which corresponds to the known relation $dF = dR$ (R - work of the exterior powers, and F - free energy) and thus the application of exterior dislocation forces is necessary. In the case of small inclination angles it is true that $\varphi dR = \tau d\varphi$ (τ - dislocation tension).

Consequently $\tau = \frac{d E}{d \varphi}$, and the dislocation elasticity $G = \frac{d \tau}{d \varphi} = \frac{d^2 F}{d \varphi^2}$

In this case the system will behave as a gel if the duration of the relaxation of the colloid particles in the processes of their agglutination as well as in the case of transition to a vacant

Card 2/4

The Problem of the Construction of Kinetic Theory of ~~20-4-35/61~~
Glutinizaton Processes.

spot of the quasi-crystalline grate will considerably exceed the duration of the exterior influences. In the case of non-fulfilment of one of these conditions the system will either decay or its elastic properties will be marked by the liquid ones. Furthermore, the character of the potential curve of a "sample" particle as approximation value is investigated, the "sample" particle having two firmly established neighbours A and C. Here the depth of the potential cavity U, which is conditioned by the fixing of the particles in the knots of the grate, will be considerably larger than in the case of an interaction of two single particles. In the case of a collective interaction, the potential cavities for intermediate particles will exist even if the powers of pushing off on any distances will exceed the powers of attraction. It is natural that cavities of this kind can only lead to a mutual fixing of the particles of a colloidal system on certain distances if the environments have a confined volume, which fixes the maximum distance of the exterior particles of the disperse phase. Moreover, a certain minimum concentration is required, for otherwise the depths of the corresponding cavities as compared with the energy of BROWN's motion will be too small and the fixing of the particles will not take

C Card 3/4

YEFREMOV, I.F., KHASIN, A.V.

Formation of ordered structures in the precipitation of suspended particles. Trudy LTI no.58:17-22 '59. (MIRA 13:7)

1. Leningradskiy tekhnologicheskiy institut im. Lennoveta.
(Suspensions (Chemistry)) (Gums and resins) (Sulfur)

S/058/61/000/010/059/100
A001/A101

AUTHOR: Yefremov, I.F.

TITLE: Analysis of the laws of ideal and real solutions based on consideration of energy of intermolecular interaction

PERIODICAL: Referativnyy zhurnal. Fizika, no. 10, 1961, 219, abstract 10D16 ("Tr. Leningr. tekhnol. in-ta im. Lensovet", 1960, no. 61, 25 - 34)

TEXT: The thermodynamical potential of a two-component solution can be approximately expressed if real intermolecular interactions are replaced by self-consistent external fields. Then the mean values of these self-consistent fields will enter the expression for the thermodynamical potential. This makes it possible to draw some qualitative conclusions as to proximity of thermodynamical behavior of the solution to behavior of the "ideal" solution. The same considerations are employed for a qualitative study of distribution of a dissolved substance between two immiscible solvents.

I. Flaher

{Abstracter's note: Complete translation}

Card 1/1

S/081/61/000/022/008/076
B102/B108

AUTHOR: Yefremov, I. F.

TITLE: *Osmotic migration of liquid in different physicochemical systems*

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 57, abstract 22B404 (Tr. Leningr. tekhnol. in-ta im. Lensoveta, no. 61, 1960, 35-42)

TEXT: The modern theories of osmotic effects are considered. It is stated that the present explanations of osmosis and osmotic pressure of solutions are not satisfactory. For systems located in external fields of force it is shown by means of thermodynamic methods that osmosis is due to a change in potential energy of the solvent molecules when the solution is formed. This change is caused by an entropy effect as well as by a change in the energies of interaction of the solvent molecules, with one another and with the molecules of the dissolved substance. If the changes of these energies compensate each other, osmosis is due to entropy effects only. In this case the extremely dilute solution will satisfy van't Hoff's

Card 1/2

Osmotic migration of liquid ...

S/081/61/000/022/008/076
B102/B108

law. It is shown that osmotic pressure, surface pressure and swelling pressure are due to effects that have the same origin. [Abstracter's note: Complete translation.]

Card 2/2

S/081/61/000/020/020/089
B101/B147

AUTHORS: Yefremov, I. F., Okhrimenko, I. S., Basenko, M. A.

TITLE: Sedimentation of polymer suspensions

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 79, abstract
20B599 (Tr. Leningr. tekhnol. in-ta im. Lensoveta, no. 61,
1960, 132 - 135)

TEXT: The causes of the different volumes of sediments of polymer suspensions in various liquids were examined. For this purpose, the sedimentation volumes of spherical particles of polymers (polychlorovinyl, fluoroplast-3, polyethylene, and α -polyoxymethylene) which do not aggregate during sedimentation, were measured in air (volume weight), water, toluene, xylene, and cellosolve. The different volumes of sediments were found to be due to the molecular component of the disjoining pressure of the layers of the liquid between the polymer particles. The disjoining pressure is directly dependent on the energy of interaction between the dispersing medium and the surfaces of particles of the disperse phase.
[Abstracter's note: Complete translation.]

Card 1/1

YEFREMOV, I.F.

First virial coefficient in the osmotic pressure equation.
Zhur. fiz. khim. 37 no.5:1001-1007 My '63. (MIRA 17:1)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета.

VERKHOLANTSEV, V.V.; YEFREMOV, I.F.

Mechanism of the formation and reversibility of trimers with pyridine rings. Part 3. Vysokom.sped. 6 no.2:213-218. F '64. (MIRA 17:2)

1. Leningradskiy tekhnologicheskij institut imeni Lensoвета.

L 16322-65 EWT(m)/EPF(c)/EPR/ERP(j)/T - Pc-4/Pr-4/Ps-4 W7/RM
ACCESSION NR: AP4049158 6/0190/64/006/011/2063/2067

AUTHOR: Verkhelantsev, V. V.; Okhrimenko, I. S.; Yefremov, I. F.

TITLE: Viscosity of nonaqueous solutions of a pyridine-containing copolymer 7 B

SOURCE: Vy*sohomolekulyarny*ye soyedineniya, v. 6, no. 11, 1964, 2063-2067

TOPIC TAGS: methylvinylpyridine, copolymer neutralization, copolymer viscosity, organ-
ic solvent/copolymer SKMVP-40

ABSTRACT: The authors studied the variation in the viscosity of nonaqueous solutions of copolymer SKMVP-40 under the influence of HCl. The copolymer was obtained in the form of free films by drying the latex, then carefully washed to remove the impurities; low-molecular fractions were removed by boiling in water and then in acetone. For neutralization, 0.09-10.38N chemically pure HCl was used. The copolymer contained 43.57% by weight of 2-methyl-5-vinyl-pyridine. The degree of neutralization (Δ) was calculated from the experimental data. The variation in the Hoppler viscosity of the SKMVP solution in a propanol: cyclohexane mixture (1:1) diluted with isobutanol was plotted against the degree of HCl neutralization, showing that neutralization first increases and then decreases the viscosity. The maximum coefficient of internal friction (η_{max}) falls in the range of 0.5-0.8, while dilution causes the $\Delta_{crit.}$ to shift toward lower values. The minimum

Card 1/3

L 16322-65

ACCESSION NR: AP4049158

viscosity occurs at low values (0.05). The α value also varies with time. Similarly to the solution of a gel, this is associated with the distribution of HCl between the pyridine groups along the copolymer chain, as well as between the polymer and solvent. The study of more dilute solutions showed that the position of α_{crit} depends on both the concentration of the copolymer in the solution and the HCl concentration. This shows that the water introduced together with the acid also affects the viscosity. The critical α values for the neutralization of SKMVP-40 in butanol solution by 0.09N HCl in the presence of additives (such as acetone, dioxane and tetrahydrofuran) are tabulated. Benzene and butylacetate affect the α value slightly. It was found that the solutions are characterized by a maximum viscosity at a degree of neutralization somewhat higher than the half-equivalent. The maximum viscosity is affected by the concentration of the solution in the presence of some polar additives. At a degree of neutralization of 0.05, a minimum viscosity was found. The presence of proton-acceptor additives increases the reduced viscosity value and the viscosity maximum shifts toward the equivalent neutralization point. The effects observed are explained by the partial ionization and solvation of the polymeric pyridine salt, the formation of reversible intermolecular hydrogen bonds as well as of solvate bridges with the participation of the polar molecules of the solvent. Orig. art. has: 1 table, 2 figures and 3 structural formulas.

Card

2/3

L 16322-65

ACCESSION NR: AP4049158

ASSOCIATION: Leningradskiy tekhnologicheskoy institut im. Lensoveta (Leningrad
Engineering Institute)

SUBMITTED: 23Jan64

ENCL: 00

SUB CODE: OC

NO REF SOV: 006

OTHER: 004

Card 3/3

LEGEZA, V.D., dotsent; YEFREMOV, I.F., dotsent

Comparative evaluation of boring machines with sinker compressed air drills. Izv. vys. ucheb. zav.; gor. zhur. 7 no.3: 102-105 '64 (MIRA 17:8)

1. Sverdlovskiy gornyy institut imeni Vakhrusheva. Rekomendovana kafedroy gornykh mashin i rudnichnogo transporta.

YEFREMOV, I.F., dotsent; LEGEZA, V.D., dotsent

Drilling underground blast holes using the BM4-P machine tool with
an air sinker. Izv.vys.ucheb.zav.;gor.zhur. 7 no.7:114-116 '64.
(MIRA 17:10)

1. Sverdlovskiy gornyy institut imeni Vakhrusheva. Rekomendovana
kafedroy gornyykh mashin i rudnichnogo transporta.

LEGKZA, V.D., dotsent; YEFREMOV, I.F., dotsent

Roller bit drilling of holes at the "Goroblagedat'" Mining
Administration strip mine. Izv. vys. ucheb. zav.; gor. zhur.
7 no.11:94-96 '64. (MIRA 18:3)

1. Sverdlovskiy gornyy institut imeni Vakhrusheva. Rekomendovana
kafedroy gornyykh mashin.

YEFREMOV, I.F. (Leningrad)

Limitations to the applicability of the laws of ideal solutions.
Zhur. fiz. khim. 38 no.10:2350-2354 0 '64. (MIRA 18:2)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoвета.

YEFREMOV, I.F.; PROKOF'YEVA, T.A.; SYRNIKOV, Yu.P.

Thermodynamics of salting-out processes in real solutions. Zbur.
fiz.khim. 38 no.11:2558-2561 N '64. (MIRA 18:2)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета.

D'YAKONOVA, E.B.; OKHRIMENKO, I.S.; YEFREMOV, I.F.

Effect of nonelectrolytes on the association of polymethacrylic
acid and polyvinyl alcohol in solutions. Vysokom. soed. 7 no.6:
1016-1019 Je '65. (MIRA 18:9)

1. Leningradskiy tekhnologicheskij institut imeni Lensovetu.

L 63833-65 ENT(m)/ENP(t)/ENP(b) IJP(c) JD
ACCESSION NR: AP5020231

UR/0069/65/027/004/0302/0507
541.19.046.8

AUTHORS: Pozin, M. Ye.; Kopylev, R. A.; Yefremov, I. F.; Varshavskiy, V. L.;
Markovach, A. G.

TITLE: Coagulation processes in the manufacture of superphosphates

SOURCE: Kolloidnyy zhurnal, v. 27, no. 4, 1965, 593-597

TOPIC TAGS: superphosphate, phosphorus compound, fertilizer, potassium compound,
calcium sulfate

ABSTRACT: The mechanism of potassium sulfate deposition on apatite granules in the manufacture of superphosphates was investigated to determine the effect of the particle size on this process. The electrokinetic potentials of apatite and other minerals in the superphosphate pulp were established. Test specimens consisted of a standard apatite concentrate with 39.5% of P_2O_5 and a reactive sulfuric acid (100 g apatite and 70 g H_2PO_4 monohydrate). The experimental process is briefly described. The ability of calcium sulfate crystals to become attached to apatite grains is determined mainly by their size. Crystals smaller than 10-15 μ show a very strong adhesion; crystals larger than 30-40 μ do not adhere

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L 63833-65

ACCESSION NR: AP5020231

and form no slime coatings which retard the decomposition reaction. The deposition is a result of the adagulation process under the effect of the Van der Waals forces at lowering of the energy barriers. The electrokinetic potentials of apatite and other minerals were measured by the electro-osmotic method at 20°C. In phosphoric acid, the electrokinetic potential of apatite has a high absolute value; in sulfuric acid its potentials are low. The potential of amorphous gypsum is near zero at all the phosphoric and sulfuric acid concentrations. In distilled water and in dilute solutions of phosphoric and sulfuric acids, apatite and azurite have a slight negative potential which becomes positive over the acid concentration range of 10^{-2} - 10^{-1} N. It was established that the formation of slime coating may be avoided by choosing conditions ensuring the formation of calcium sulfate crystals larger than 20-30 μ or by controlling the charges of the interacting particles. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Leningradskiy tekhnologicheskii institut im. Lensoveta (Leningrad Engineering Institute)

SUBMITTED: 09Mar64

ENCL: 00

SUB CODE: EC, IC

NO REF SOV: 009

OTHER: 003

Card 2/2 *jt*

POZIN, M.Ye.; KOPYLEV, B.A.; YEFREMOV, I.F.; VARSHAVSKIY, V.L.; MARKOVICH,
A.S.

Coagulation processes in the production of superphosphates.
Koll. zhur. 27 no.4:593-597 J1-Ag '65.

(MIRA 18:12)

1. Leningradskiy tekhnologicheskii institut imeni Lensovet
Submitted March 9, 1964.

D.Y. KONOVA, E.A.; YENIKHOV, I.P.

Starting-out in solutions of polyvinyl alcohol and polyacrylic
acid. *Str. fiz. khim.* 22 no.10:2602-2605 1955. (JAPRA 19:12)

L. Leningradskiy tekhnologicheskij institut imeni Leningova.
Submitted July 22, 1964.

US'YAROV, O.G.; LAVROV, I.S.; YEFREMOV, I.F.

Compacting of sediments in a static electric field. Koll. zhur.
27 no.5:787-788 S-O '65. (MIRA 18:10)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета.

YEFREMOV, I.F., kand. tekhn. nauk, dots.; LEGEZA, V.D., kand.
tekhn. nauk, otv. red.

[Boring machinery; manual for laboratory work in the course
"Mining machinery" for students of the Sverdlovsk Mining
Institute] Buril'nye mashiny; uchebnoe posobie k laboratornym
zaniatiyam po kursu "Gornye mashiny" dlia studentov Sverd-
lovskogo gornogo instituta. Sverdlovsk, Izd. Sverdlovskogo
gornogo in-ta. Pt.1. [Percussion boring machinery] Pnevma-
ticheskie udarnye buril'nye mashiny. 1964. 58 p.
(MIRA 17:9)

GAVRICHENKOV, Dmitriy Nikolayevich, dotsent, kand.ekon.nauk; YEFREMOV,
I.I., spetsred.; GEL'MAN, D.Ya., red.izd-va; SAYEL'YEVA, Z.A.,
tekhnred.

[Cost and ways of reducing it in flour, groat and feed milling]
Sebestoimost' i puti ee snizheniya na predpriyatiyakh muko-
mol'noi, krupianoi i kombikormovoi promyshlennosti. Moskva,
Izd-vo tekhn.i ekon.lit-ry po voprosam mukomol'no-krupianoi,
kombikormovoi promyshl. i elevatorno-skladskogo khoz., 1958.
131 p. (MIRA 12:3)

(Grain milling--Cost)

YEFREMOV, I.I., inzh.

Some formulas and statutes of Register regulations. Rech. transp.
17 no. 6:27 Je '58. (MIRA 11:7)

1. Nachal'nik sluzhby sudovogo khozyaystva Yeniseyskogo parokhodstva
(Ship registers)

YEVREMOV, Ivan Ivanovich; BIL'DE, Anatoliy Eduardovich; BAUM, A.Ye.,
kand.tekhn.nauk, red.; SINTSEROV, A.D., inzh., red.; D'YACHENKO,
V.M., red.; SAVEL'YEVA, Z.A., tekhred.

[Milling machinery industry and flour-milling enterprises of the
Hungarian People's Republic] Mel'nichnoe mashinostroenie i pred-
priiatia mukomol'noi promyshlennosti Vengerskoi Narodnoi Respubli-
ki. Pod red. A.E.Bauma, i A.D.Sintserova. Moskva, Izd-vo tekhn. i
ekon.lit-ry, 1960. 59 p. (MIRA 13:8)

(Hungary--Grain-milling machinery)

(Hungary--Flour mills)

ACHKASOVA, I.O.; GALKINA, A.G.; YEFREMOV, I.I.; SMAKHTINA, Yu.B.; KOMISSAROVA,
M.I.; SOVETOVA, L.Ye.; CHISTIKOVA, A.I.; SHAKHOVA, A.N.

Effectiveness of ambulatory treatment of cholelithiasis patients
at Zheleznovodsk Health Resort. Sbor. nauch. rab. vrach. san.-kur.
uchr. profsoiuzov no.1:121-125 '64.

(MIRA 18:10)

1. Zheleznodorozhnaya kurortnaya poliklinika (glavnyy vrach I.I.
Yefremov).

ACC NR: AP6035497 (N) SOURCE CODE: UR/0198/66/002/010/0115/0120

AUTHOR: Yefremov, I. I. (Kiev)

ORG: Institute of Hydromechanics, AN UkrSSR (Institut gidromekhaniki AN UkrSSR)

TITLE: Unsteady motion of a thin profile beneath the free surface of a weightless liquid of finite depth

SOURCE: Prikladnaya mekhanika, v. 2, no. 10, 1966, 115-120

TOPIC TAGS: fluid dynamics, aerodynamic characteristic, streamline flow

ABSTRACT: The author considers the linear problem of small harmonic oscillations of an infinitely thin profile of given length in a plane-parallel flow of weightless incompressible fluid with a constant undisturbed velocity bounded by the free surface above and by a solid bottom below. It is shown that the problem reduces to consideration of nonstationary flow around some infinite grating with an infinite number of profiles of special form. The method of discrete vortices is used for solving this problem. Numerical calculations show that when the distance between the solid bottom and the thin profile is increased, the aerodynamic coefficients of the profile approach the corresponding characteristics for motion beneath the free surface of a liquid of infinite depth. When the distance between the profile and the bottom is reduced, the aerodynamic characteristics increase and approach the corresponding values

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ACC NR: AP6035497

for motion close to a solid boundary. The data obtained in this paper for stationary streamline flow with a relative submersion $h > 0.25$ and relative distance from the bottom $h_0 > 0.25$ show satisfactory agreement with the results of A. N. Panchenkov who used the asymptotic method of small parameters. The method proposed in this paper gives results which correspond more accurately to the initial equation when relative submersions and relative distances are small. Orig. art. has: 4 figures, 16 formulas.

SUB CODE: 20/ SUBM DATE: 06Aug65/ ORIG REF: 003

Card 2/2

ACC NR: AM6028923

(N)

Monograph

UR/

Yukhimenko, Anatoliy Ivanovich; Berkovskiy, Boris Semenovich; Mirabel', Petr Petrovich; Yefremov, Ion Ivanovich; Panchenkov, Anatoliy Nikolaevich; Belinskiy, Vissarion Grigor'yevich; Koval'chuk, Sergey Viktorovich; Putilin, Svetozar Ivanovich; Roman, Vasilii Mikhaylovich; Miodushevskaya, Alla Vladimirovna; Tkachenko, Irina Petrovna; Ivchenko, Vladimir Moiseyevich

Problems and methods of hydrodynamics of underwater wings and propellers (Zadachi i metody girdodinamiki podvodnykh kryl'yev i vintov) Kiev, Izd-vo "Naukova dumka", 1966. 158 p. illus., biblio. (At head of title: Akademiya nauk Ukrainskoy SSR. Institut gidromekhaniki) 1,2000 copies printed.

TOPIC TAGS: dimensional flow, flow measurement, cavitation, ~~propulsion~~ ~~system~~, fluid mechanics, *hydrodynamics*, *ship component*, *digital computer*, *computer calculation*

PURPOSE AND COVERAGE: This book is intended for scientific and engineering personnel of research and design organizations specializing in high-speed hydrodynamics. The book discusses the hydrodynamics of bodies moving near an open surface, the discontinuity between liquids of different densitites, and the development of cavitation. There are

Card 1/2

ACC NR: AM6028923

74 references, 43 of which are Soviet.

TABLE OF CONTENTS [abridged]:

Foreword -- 3

Ch. I. Two-dimensional flow -- 6

Ch. II. Three-dimensional flow -- 46

Ch. III. Numerical method of calculating the hydromechanical characteristics of a foil on a digital computer -- 81

Ch. IV. Fundamentals of the hydrodynamics of supercavitating propulsion systems -- 107

References -- 157

SUB CODE: 20, 09/ SUBM DATE: 01Mar66/ ORIG REF: 044/ OTH REF: 030

Cord 2/2

L 05727-61 EWT(1)/EWT(m)/EWT(m)/EWT(w) IJP(c) WW/EN/OD

ACC NR: AT6016722 (N) SOURCE CODE: UR/0000/65/000/000/0074/0083

AUTHOR: Yefremov, I. I.

ORG: Institute of Hydromechanics, AN UkrSSR (Institut gidromekhaniki AN UkrSSR)

TITLE: Vibrations²⁶ of a thin shape in subsonic flow near a solid wall

SOURCE: AN UkrSSR. Gidrodinamika bol'shikh skorostey (High speed hydrodynamics), no. 1, Kiev, Izd-vo Naukova dumka, 1965, 74-83

TOPIC TAGS: vibration analysis, subsonic flow

ABSTRACT: The article considers the unsteady state movement of a thin rectangular shape of length $2c$ with a constant subsonic entry velocity V_0 at a height h on a solid wall. The movement is considered with respect to a movable system of coordinates XOY. The OY axis is directed along the solid wall in the direction of flight. The projection of the middle point of the shape on the solid wall is taken as the origin of coordinates. If ρ_0 is the density of the undisturbed gas, then, adopting the assumptions of the theory of small disturbances, it can be assumed that the potential of the acceleration of the disturbed movement of the gas has the form

$$\phi = \frac{P - P_0}{\rho_0}, \quad (1)$$

Card 1/2

L 05727-51

ACC NR: AT6016722

where P_0 is the pressure in the undisturbed flow. The article proceeds to a mathematical solution of the problem, using the wave equation.
Orig. art. has: 16 formulas.

SUB CODE: 20/ SUBM DATE: 30Sep65/ ORIG REF: 003/ OTH REF: 001

Card 2/2 *plw*

I. 10754-67 EMP(n)/EMP(d)/EMP(1)/EMP(m)/EMP(k)/FS(m)/EMP(w) — 77

ACC NR: AR6016455

(N)

SOURCE CODE: UR/0124/65/000/012/B047/B048

AUTHOR: Yefremov, I. I.

TITLE: Effect of compressibility on the aerodynamic characteristics of a wing moving close to the surface of an incompressible liquid

SOURCE: Ref. zh. Mekhanika, Abs. 12B329

REF SOURCE: Sb. Dinamika sistem tverdykh i zhidkikh tel. Kiev, 1965, 81-88

TOPIC TAGS: aerodynamic characteristics, incompressible fluid, thin wing, aerodynamic lift

ABSTRACT: The author solves the problem of the motion of a thin profile at subsonic velocity close to the surface of an incompressible liquid in the linear formulation. The problem reduces mathematically to conjugation of two linear equations of the elliptic type with linear boundary conditions. The method of integral equations is used for solving the problem. The resultant singular integral equation for the intensity of vortices substituted for a thin wing is solved by the small parameter method and the method of collocations. Formulas are derived which account for the effect of the interface on the lift coefficient and angle of zero lift for a thin curved profile. The author also considers the problem of the position of the center of pressure of a flat plate moving close to a screen. The results of the calculations are given in the form of graphs. [Translation of abstract]

SUB CODE: 20

Card 1/1

YEREMOV, I.N., Cand Tech Sci—(diss) "Determination of basic parameters of the system of development ^{by means of} long columns ^{for} the thin- and ^{layers of} medium strength ^{thickness} layers of the Karaganda ^a Basin." Alma-Ata, 1958.
18 pp with graphs (Min of Higher Education USSR. Kuznetsk Mining Metallurgical Inst), 150 copies (ML, 48-58, 104)

-39-

YEFREMOV, I.M.

Selecting a method of determining the dimensions of a mining area
for longwall mining on strike. Izv. AN Kazakh. SSR. Ser. gor dela
no.2:9-19 '58. (MIRA 12:10)
(Coal mines and mining)

YEFREMOV, I.M.

Establishing parameters for the system of cutting coal in long
pillars along the strike in mining narrow and medium-wide coal
seams in the Karaganda Basin. Vest. AN Kuzakh. SSR 14 no.8:
43-55 Ag '58. (MIRA 11:10)
(Karaganda Basin--Coal mines and mining)

YEFREMOV, I.M.

Technical and economic grounds for longwall lengths and loader
clean-up widths in cutter-loader mining of certain Karaganda
Basin seams. Trudy Inst. gor. dela AN Kazakh. SSR 5:3-15 '60.

(MIRA 13:8)

(Karaganda Basin—Coal mines and mining)

YEFREMOV, I.M.

Using an electric arc for the breaking of rock. Trudy Inst.
gor. dela AN Kazakh. SSR 13:62-68 '64. (MIRA 17:7)

YEFREMOV, I.M.

Determining the diameter of the openings of the vortex of electric
arc type air heaters. Trudy Inst.gor.dela AN Kazakh.SSR 15:70-72
'64. (MIRA 18:2)

L 16152-65 AFETR
ACCESSION NR: AP4047029

S/0286/64/000/018/0007/0008

AUTHOR: Yefremov, I. M. B

TITLE: Device for thermal crushing of rocks. Class 21, No. 165144

SOURCE: Byul. izobr. i tovar. znakov, no. 18, 1964, 7-8

TOPIC TAGS: rock, crushing, thermal crushing, thermal drilling, drilling, plasma torch

ABSTRACT: An Author Certificate has been issued for a plasma torch for rock drilling and crushing. The device (see Fig. 1 of the Enclosure) consists of cylindrical housing and a hollow cathode and anode separated by an insulator with holes through which an arc-stabilizing gas is fed into the space between the electrodes. To prolong the service life of the electrodes, a rotating magnet which is mounted coaxially to the cathode moves the cathode spot of the arc in the vertical and horizontal planes, and the anode is enlarged towards the bottom. In a variant of the device, to increase the temperature of the plasma jet, fuel is supplied into the arc zone through

Card 1/3

L 16152-65

ACCESSION NR: AP4047029

holes in the cathode. In another variant of the device, the magnet rotates on rolling elements installed in the cathode and has projections on the outside perimeter ensuring its rotation under the pressure of fuel jets brought into the cathode space. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 03Jun63

ENCL: 01

SUB CODE: IE, ME

NO REF SOV: 000

OTHER: 000

Card 2/3

L 16152-65

ACCESSION NR: AP4047029

ENCLOSURE: 01

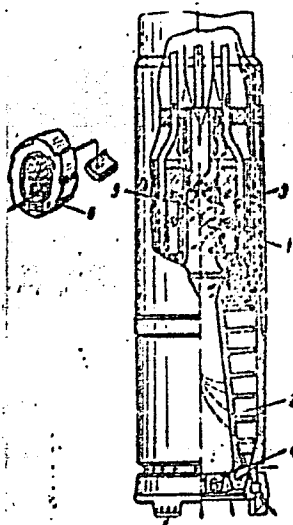


Fig. 1. Diagram of the plasma torch.

1 - Cathode; 2 - anode; 3 - magnet;
4 - bottom; 5 - holes; 6 - projections

Card 3/3

L 56497-65

ACCESSION NR: AP5017794

UR/0286/65/000/011/0008'0008
666.96.04.002.5

AUTHOR: Yefremov, I. M.

TITLE: A torch for heat treating building materials. Class 4, No. 171338

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 8

TOPIC TAGS: construction material, gas discharge plasma, electric gas heater, heat treatment

ABSTRACT: This Author's Certificate introduces a torch for heat treating building materials using a gas-discharge plasma from an electrode chamber. The chamber is water cooled and connected to a ring channel. The device produces an annular working jet. The electrodes are coaxial nozzles, and the ring channel is helical.

ASSOCIATION: none

SUBMITTED: 30Nov62

ENCL: 01

SUB CODE: EE, IL

NO REF SOV: 000

OTHER: 000

Card 1/2

L. A. 77-4-

ACCESSION NO: AP5017734

ENCLOSURE: 01

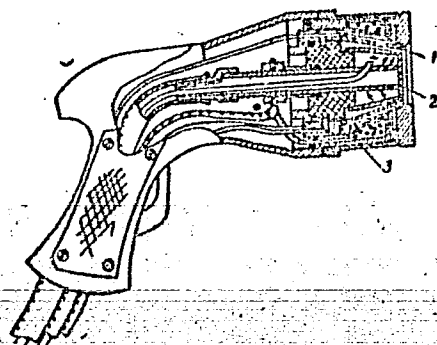


Fig. 1. 1--electrode; 2--electrode;
3--helical ring channel

Card 2/2

YEFREMOV, I. P.

USSR/Engineering - Metal working

Card 1/1 : Pub. 103 - 4/23

Authors : Efremov, I. P., and Shneyder, I. G.

Title : Concerning the workability of stainless steels

Periodical : Stan. i instr. 8, 13-15, Aug 1954

Abstract : General information concerning the workability of stainless 1Kh18N9T and 4Kh13 steels is presented. The working of steel was conducted with VK8, T15K6, and R18 cutters, at cutting speeds of 3.2 to 140 m/min. Table.

Institution :

Submitted :

YEFREMOV, I.P., kandidat tekhnicheskikh nauk; SHNEYDER, Yu.G., kandidat
tekhnicheskikh nauk

Investigation of the machining of stainless steel used in aircraft
manufacture. [Iss.] LONITOMASH no.34:167-177 '54.

(MIRA 8:10)

1. Leningradskiy institut aviatsionnogo priborostroyeniya.
(Surfaces (Technology))

YEFREMOV, I. S.

YEFREMOV, I. S. "For a unified, Michurinist biology", Sbornik trudov In-ta (Stavrop. gor. ped. in-t), Issue 2, 1948, p. 3-14.

SO: U-3042, 11 March 53, (Letopis, 'Zhurnal 'nykh Statey, No.7 1949).

ILYUKHIN, V.V., kand. fiz.-matem. nauk; DUBLYANSKIY, V.N., kand. geol.-
mineral. nauk; YEFREMOV, I.P.

First All-Union Congress of Speleologists-Sportemen. Peshchery
no.3:111-113 '63. (MIRA 18:2)

YEFREMOV, I. S.

YEFREMOV, I. S. "Nitrogen metabolism and the influence on it of drying in oats during various periods of vegetation", Sbornik trudov In-ta (Stavrop. gor. ped. in-t), Issue 2, 1948, p. 15-65, - Bibliog: 65 items.

SO: U-3042, 11 March 53, (Latopis 'Zhurnal 'nykh Statoy, No.7 1949).